Amendments to the Specification

On page 1, please replace the first paragraph with the following:

This application is a continuation of application serial no. 08/226,605 filed on April 12, 1994, now U.S. Patent No. 6,280,589, which claims the benefit of priority to German Application Serial No. 93810272.0, filed on April 15, 1993, both of which are incorporated herein by reference.

On page 4, please replace the paragraph starting on line 1 with the following:
In a further preferred process step, immediately after the injection of the sample plug, the electrolyte buffer is allowed to advance into the supply channel and into the drain channel at the respective supply and drain ports for a time period, which amounts to at least the migration time of a slowest component within the sample plug from the supply port to the detector. Thus, the sample is pushed back into the respective supply and drain channels and substantially prevented from uncontrollably diffusing into the electrolyte buffer which is transported past the supply and drain ports. In addition the method allows ~~to~~for control of the sample composition within the electrolyte buffer.

On page 4, please replace the paragraph starting on line 10 with the following:
The sampling device according to the invention comprises an electrolyte channel, and a supply channel and a drain channel for the sample, which discharge into the electrolyte channel at respective supply and drain ports. The ports are arranged with respect to each other such[[,]] that a sample volume is geometrically defined. The supply and drain channels each are inclined to the electrolyte channel. Means are provided for electro-kinetically injecting a sample into the sample volume. The resistance to flow of the source and drain channels with respect to the electrolyte buffer is at least about 5% lower than the respective resistance to flow of the electrolyte channel. Preferred variants of the method according to the invention and preferred embodiments of the sampling device according to the invention are subject of the respective dependent claims.

On page 5, please replace the paragraph starting on line 36 with the following:
In Fig. 3, a first exemplary embodiment of the sampling device is shown. It comprises a capillary channel piece 22, which on one end is connected to a capillary channel communicating with the reservoir R for the electrolyte buffer and in a longitudinal direction on the other end with a capillary channel where the electrophoretic separation of the sample takes place, and which leads to the detector(s) and in further consequence to the waste receptacle(s) W. The sampling device further

comprises a supply channel 23, which communicates with a source receptacle S for the sample, and a drain channel 24 which leads to a drain receptacle D. The source channel 23 and the drain channel 24 are inclined to the longitudinal extension of the channel piece 22, preferably they are arranged about perpendicular such, that together with the channel piece 22 they form a double T structure, as shown in the drawing. The source channel S and the drain channel D each discharge into the channel piece 22 at respective supply and drain ports 25, 26. According to the drawing in Fig. 3 the supply port 25 and the drain port 26 are spaced apart from each other longitudinally at the channel piece 22 such, that a sample volume 27 is geometrically defined as will be explained in more detail hereinafter. It is to be understood, that the drain channel 24 can be arranged in direct longitudinal extension of the source channel 23 such, that the supply and drain ports 25, 26 are situated opposite each other. In that case, the channels of the sampling device have no double T structure, but they are arranged in the form of an ordinary crossing.

On page 10, please replace the paragraph starting on line 33 with the following:
The combination of a structure that geometrically defines the injected sample volume with an electro-kinetic injection of the sample over a defined minimum time period allows to ~~relyably~~reliably control the sample volume and to assure that the composition of the sample contained within the sample volume reflects the original composition of the sample in the reservoir. A further improvement of the method and the sampling device according to the invention allows a considerable reduction of uncontrolled leakage or diffusion of sample components into the electrolyte buffer. Thus, it is possible to reduce the leakage or diffusion such, that the still occurring leakage results in a concentration of the sample in the electrolyte buffer, that is less than 3% of the original concentration of the sample. By this measure the noise of the detected electrophoretic signal is reduced and the detection limits are increased